## QUALITY ASSURANCE PLAN FOR ENVIRONMENTAL ASSESSMENTS:

PREPARATION, REVIEW, APPROVAL,
AND
USE AS A SERVICE IN DECISION MAKING

**U.S. Department of Energy Office of Science** 

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## **Table of Contents**

1.0	INTRODUCTION		
2.0	SCOPE AND APPLICABILITY		
3.0	REFERENCES OF SPECIFIC REGULATORY AND PROCEDURAL DRIVERS		
	3.1 3.2	Requirements and Regulations Policies, Procedures, and Guidance 3.2.1 Departmental and Secretarial 3.2.2 Office of Environment, Safety and Health 3.2.3 Office of Science	
4.0	ORGANIZATIONAL ROLES AND RESPONSIBILITIES		
	4.1 4.2	Office of Science Organization Office of Laboratory Operations and Environment, Safety and Health; Environment, Safety and Health Division (SC-83)	
	4.3 4.4	Office of Science HQ Program Offices	
5.0	ENVIRONMENTAL ASSESSMENT MANAGEMENT PROCESSES		
6.0	ENVIRONMENTAL ASSESSMENTS QUALITY ASSURANCE INFRASTRUCTURE		
	6.1	Management 6.1.1 Criterion 1: Program 6.1.2 Criterion 2: Personnel Training and Qualifications 6.1.3 Criterion 3: Quality Improvement 6.1.4 Criterion 4: Documents and Records	
	6.2	Performance 6.2.1 Criterion 5: Work Processes 6.2.2 Criterion 6: Design 6.2.3 Criterion 7: Procurement 6.2.4 Criterion 8: Inspection and Testing	
	6.3	Assessment 6.3.1 Criterion 9: Management Assessment	

6.3.2 Criterion 10: Independent Assessment

7.0

ENVIRONMENTAL ASSESSMENTS AND QUALITY DECISIONS

## 8.0 REFERENCES

APPENDIX A	Department of Energy Organizational Chart
APPENDIX B	Office of Science Organizational Chart
APPENDIX C	Office of Science and Chicago Operations Office
	National Environmental Policy Act
	Document Managers Guidance
APPENDIX D	Example of SC EA NEPA Determination
APPENDIX E	<b>Example State and Tribal Notification Letters</b>
APPENDIX F	Office of Science Internal Scoping Procedures
	for Environmental Assessments
APPENDIX G	Office of Science Public Participation Plan
	for Environmental Assessments

## 1.0 INTRODUCTION

The National Environmental Policy Act (NEPA) is the federal government's basic charter for protection and wise use of the environment. The implementation of NEPA's procedural provisions enable federal decision makers to factor environmental values and consequences into decisions on major federal actions regarding the adoption of official policy, formal plans, and programs, and for the approval of specific projects. The implementation of NEPA's procedural provisions and the use of the NEPA process are a service to the decision maker by enabling an informed decision that considers environmental consequences along with other decision criteria (i.e., mission considerations, cost, schedule, etc.). The NEPA process also is a service to the public by enabling public input into potential federal decisions and by providing public disclosure of agency actions that affect the environment. The NEPA process therefore enables the agency to achieve the results, outcomes, and products that respond to the goals of the Act and the goals of the Council on Environmental Quality (CEQ) regulations: quality federal decisions that protect, restore and enhance the quality of the human environment.

NEPA's procedural provisions provide for the preparation of Environmental Assessments (EA) as one of the NEPA documents to be used as a tool to inform decision makers and the public regarding the consequences of the approval of specific proposed projects and other actions. EAs are to be used in deciding whether to prepare an Environmental Impact Statement (EIS) based on the presence or absence of significant impacts to the human environment. The Department's Office of Science (SC) has used the EA process extensively to support project decision making. This has included EAs leading directly to Findings of No Significant Impact (FONSI), EAs leading to Proposed and Final FONSIs published in the Federal Register, and the adoption of EAs prepared by other federal agencies for actions on SC sites that resulted in preparation of separate DOE FONSIs.

To ensure that the use of EAs by SC continues to enable quality decisions, public disclosure, and environmental protection, quality assurance (QA) planning is essential. This QA Plan for the conduct and management of the EA process will enable the process to be timely. It will provide for the continuation of the QA infrastructure within SC that supports the NEPA process (both at SC HQ and in the field), and it will enable quality decision making both within the NEPA process (i.e., whether to prepare an EIS) and with respect to the environment. This Office of Science QA Plan is the first revision of the original QA Plan of August 1994 that was prepared in support of the former Office of Energy Research's delegated authority for EAs.

## 2.0 SCOPE AND APPLICABILITY

This QA Plan follows the format of DOE Order 5700.6C, "Quality Assurance". It defines and summarizes SC's policy, procedures, and requirements for implementing a comprehensive QA program for the preparation, review, and approval of EAs and for their use as a service in decision making. This QA Plan formalizes the continuation of SC's existing program of QA and continuous improvement related to the use of EAs, the results of which have been described and summarized in several of the SC NEPA Compliance Officer's (NCO) Annual Program Summaries (*Refs. 1, 2, 3, 4*).

The procedures set forth in this QA Plan will be applied to the use of EAs in support of SC decision making by the program elements in SC HQ. This applies to those actions that are within the purview of SC as Program Secretarial Officer (i.e., actions for which the EA authority is not within the purview of a Field Organization, as per the Secretarial Policy Statement on NEPA of June 13, 1994). This QA Plan also will be applied by the SC HQ NCO and program elements in providing assistance to the Operations Offices in SC's role as Lead Program Secretarial Officer responsible for providing management overview of the Operations Offices, and as Cognizant Secretarial Officer responsible for operations at eleven National Laboratories. These responsibilities are outlined in the *Office of Science Stewardship Functions, Responsibilities, and Authorities Document* (the SC "FRA Document"). When requested by the Operations Offices, SC will use this QA Plan for review of Operations Office EAs, for support of the Operations Office EA process, and for assisting the Operations Offices in using EAs to support their decision making, on EA actions that are within the purview of the Operations Office (as per the Secretary's June 13, 1994, Policy Statement).

# 3.0 PRIMARY REGULATIONS, PROCEDURES, GUIDANCE AND OTHER NEPA TOOLS

The Department of Energy's August 1998 National Environmental Policy Act Compliance Guide, Volume I (see section 3.3 below) contains the national regulations, requirements, Executive Orders, and guidance applicable to the successful implementation of NEPA's procedural provisions. Volume II of the DOE NEPA Compliance Guide contains the Department's implementing regulations and related internal requirements, guidance documents, process improvement studies, and other helpful reference materials. The Office of Science will use this Departmental compendium of NEPA references as the standards to be used in the preparation, review and approval of EAs that meet the Department's expectations for quality, completeness, and adequacy.

SC also will continue to draw upon its use of EAs to support SC decision making, where which is appropriate. This continuing trend and the lessons learned from it (such as *Refs. 3, 4, 5, 6, 7*) will supplement the DOE NEPA Compliance Guide with SC-specific information.

For clarity and convenience, the primary National, Departmental, and Office of Science (plus its former Office of Energy Research) references are listed below. The SC NCO has copies of these

materials. Additionally, most of these reference sources can be found on the DOE NEPA web site maintained by the DOE Office of Environment, Safety and Health (EH) and on the SC NEPA web site:

DOE NEPA Web Site http://tis-nt.eh.doe.gov/nepa/index.html-ssi

SC NEPA Web Site http://www.sc.doe.gov/production/er-80/er-83/nepacomp.html

## 3.1 National Regulations and Guidance

- The National Environmental Policy Act of 1969, As Amended.
- 40 CFR 1500-1508, "Council on Environmental Quality Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act."
- Council on Environmental Quality, "Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations," 55 FR 18026.
- Council on Environmental Quality, "Considering Cumulative Effects Under the National Environmental Policy Act", January 1997.
- U.S. Environmental Protection Agency, "Consideration of Cumulative Impacts in EPA Review of NEPA Documents", EPA 315-R-99-002, May 1999.
- Council on Environmental Quality, "Environmental Justice: Guidance Under the National Environmental Policy Act", December 1997.
- U.S. Environmental Protection Agency, "Guidance for Incorporating Environmental Justice Concerns in EPA's NEPA Compliance Activities", April 1998.
- 36 CFR 800, "Protection of Historic Properties; Recommended Approach for Consultation on Recovery of Significant Information From Archaeological Sites; Final Rule and Notice", Advisory Council on Historic Preservation, May 18, 1999 (64 FR 27044).

## 3.2 Department of Energy and Secretarial-Level

- 10 CFR 1021, "Department of Energy National Environmental Policy Act Implementing Procedures and Guidelines."
- 10 CFR 1022, "Department of Energy Compliance with Floodplain/Wetlands Environmental Review Requirements."

- "Secretarial Policy Statement on the National Environmental Policy Act," Office of the Secretary, June 13, 1994.
- DOE Order 451.1A, "National Environmental Policy Act Compliance Program."
- DOE Order 481.1, "Non-Department of Energy Funded Work (Work for Others)."
- DOE Order, 430.1 "Life Cycle Asset Management"
- DOE Order 5700.6C, "Quality Assurance."
- "Quality Assurance Program: A Total Management System, Office of Nuclear Safety Policy and Standards, May 1992. [Contains DOE Order 5700.6C, along with explanatory guidance]

## 3.3 DOE Office of Environment, Safety and Health

- "National Environmental Policy Act Compliance Guide", August 1998.
   Volume I: General NEPA References.
   Volume II: Department of Energy NEPA Regulations and Guidance.
- "National Environmental Policy Act Contracting Reform Guidance," December 1996.
   [Contains advice on the role of the NEPA Document Manager and effective contract management]
- "A Brief Guide: Department of Energy-wide Contracts for National Environmental Policy Act (NEPA) Documentation", issued by Office of Environment and Office of Procurement and Assistance Management with assistance of Albuquerque Operations Office, Revised August 1998.
- "Improving DOE's National Environmental Policy Act (NEPA) Compliance: Role of the NEPA Compliance Officer (NCO)/Delegation of Environmental Assessment (EA) Determination Authority, July 15, 1992.
- "Recommendations for the Preparation of Environmental Assessments and Environmental Impact Statements," (EH "Green Book"), May 1993.
- "Directory of Potential Stakeholders for Department of Energy Actions Under the National Environmental Policy Act" (EH "Yellow Book"), 13<sup>th</sup> Edition, January 2000. [This Directory is periodically updated]
- "Effective Public Participation under the National Environmental Policy Act" (EH

"Gold Book"), Second Edition, August 1998.

- "DOE Environmental Assessment Checklist, August 16, 1994.
- "Glossary of Terms Used in DOE NEPA Documents", September 1998.
- "NEPA Document Electronic Publishing Standards and Guidelines", October 1998.

#### 3.4 DOE Office of Science

- "Office of Energy Research Environmental Assessment Preparation Training Course," ER NCO Communication 94-06 (Rev. 02), November 1994. [A handbook with relevant EA preparation materials]
- "Office of Energy Research Guidance on the Preparation, Scope, and Content of Environmental Assessments (EA), ER NCO Communication 92-04, November 5, 1992.
- "Office of Energy Research Lessons-Learned from Environmental Assessment Reviews ER NCO Communication 94-02, March 10, 1994.
- "Office of Energy Research Guidance on Early Timing and Implementation of the NEPA Process and Integration of the NEPA Process with the Project Management System, ER NCO Communication 94-01, August 18, 1994.
- "Current Standard Format to be used for All Office of Energy Research Findings of No Significant Impact (FONSI), ER NCO Communication 92-01, February 24, 1992.
- "Annotated Bibliography of the Office of Science Environmental Assessments (EA) and Environmental Impact Statements (EIS) Completed Since Secretary of Energy Notice (SEN) 15-90, ER NCO Communication 92-07, Revision 4, June 2000.

## 4.0 ORGANIZATIONAL ROLES AND RESPONSIBILITIES

## 4.1 Office of Science Organization

The organizational placement of the Office of Science (SC) within the Department is shown on Appendix A and the organizational structure of SC is shown on Appendix B. SC is an integral part of the Department's Energy, Science and Environment program reporting to the Under Secretary. Within SC, the Office of Laboratory Operations and Environment, Safety and Health (SC-80) coordinates infrastructure, ES&H, and construction management activities within the SC science programs and between the field, laboratories, DOE HQ, and other agencies. The ES&H Division (SC-83) is the central focal point for ES&H matters, including NEPA, within SC-80.

# 4.2 Office of Laboratory Operations and Environment, Safety and Health; and the Environment, Safety and Health Division (SC-83)

The mission of the Office of Laboratory Operations and Environment, Safety & Health is to provide leadership and a corporate focal point in the conduct of world-class science at Office of Science (SC) laboratories in the areas of operations, construction management, infrastructure, and integrated safety and environment management (ISM). The goals of the Office of Laboratory Operations and Environment, Safety & Health are:

- to ensure that required programmatic facilities are constructed on time, and within scope and schedule
- ensure that general purpose infrastructure are mission ready
- ensure that environment, safety, and health (ES&H) are fully integrated with research and support activities and are conducted in a manner that is protective of the workers, the public and the environment
- ensure that operations reflect cost effective and efficient stewardship of Department of Energy (DOE) funding and assets

SC-80 provides the ES&H technical expertise for SC HQ and serves as a resource to the field elements that implement research activities sponsored by SC. SC-80 consists of three divisions: the Construction Management Support Division (SC-81), the Laboratory Infrastructure Division (SC-82), and the Environment, Safety and Health Division (SC-83). SC-83 consists of ES&H professionals with a variety of disciplines that enable SC to utilize a systematic and interdisciplinary approach to ensure the integrated use of the natural, social, engineering, and environmental sciences in SC planning and decision making. SC-83 provides overall crosscutting coordination of ES&H and technical support for SC. This includes the broad QA elements of ES&H including: planning and leadership; technical support to the SC program and field elements; policy development; standards, guidance and procedures development; communications development and coordination; training and workshops; and lessons learned and continuous improvement initiatives. The SC NEPA function and the NCO are located within the SC-83 organization.

## **4.2.1** Office of Science NEPA Compliance Officer

The SC NCO has the responsibilities and authorities as defined and stated in: DOE Order 451.1A;

- EH September 21, 1994, memorandum on "Delegation of Environmental Assessment Approval Authority" (Ref. 8)
- July 15, 1992, EH memorandum on the role of the NCO; and the June 13, 1994, Secretarial Policy Statement on NEPA.

These all are found in the DOE NEPA Compliance Guide. The NCO is responsible for overseeing SC's implementation of NEPA's procedural provisions that are defined in 40 CFR

1500-1508, 10 CFR 1021, and the other requirements, regulations, policies, and procedures identified in this QA Plan. Additionally, the SC Stewardship Functions, Responsibilities, and Authorities Document (dated June 2000) includes the preparation, review and approval of NEPA documentation under the Integrated Safety Management function of analyzing hazards. The SC NCO oversees the NEPA portion of that function for SC HQ. The NCO reports to SC-1 through the SC-83 Division Director and the SC-80 Associate Director.

The General Responsibilities of the Office of Science NCO are:

- Providing assistance to and enabling the SC Program Offices and NEPA Document Managers in their line management responsibility for implementing NEPA and effectively utilizing the EA process to support planning and decision making, as part of SC's stewardship of science;
- Assuring the integrity of the EA process and assuring that EAs prepared under the purview of SC HQ meet DOE's standards for quality and adequacy;
- Assuring quality assurance and continuous improvement in the implementation of NEPA and the SC EA process by using the principles of Total Quality Management (TQM) and Quality Assurance (DOE Order 5700.6C), as appropriate;
- Assuring the quality of EAs prepared under the purview of the Field Organizations in support of decision making on SC-sponsored actions, projects, and research activities, when assistance is requested by the SC Field Organizations:
- Review and concurrence in all of the formal elements of the document management process for all EAs under the purview of SC HQ, as well as those EAs under the purview of Field Organizations, when requested to do so.

## 4.3 Office of Science Program Associate Director Offices

The SC Program Associate Director Offices constitute the HQ line management for sponsorship of the SC scientific and research mission. This includes implementation of NEPA's procedural provisions in order to support project and program planning and decision making. Each of SC's four Program Associate Director Offices contain one staff representative who serves as the ES&H representative and the official "NEPA Contact" to receive correspondence and information from the DOE Office of NEPA Policy and Assistance (EH-42). Each NEPA Contact also has been provided with a copy of the DOE NEPA Compliance Guide. The NEPA Contacts provide assistance to the Program Office Research Program Managers who are responsible for the planning, cost, schedule, and management of the research projects and programs governed by DOE Order 430.1 (and other requirements) and for integrating the NEPA process into project planning and scheduling.

## **4.3.1** Office of Science NEPA Document Managers

For those EAs prepared under the purview of SC HQ, a staff member of the sponsoring SC HQ Program Associate Director Office normally will serve as the NEPA Document Manager (NDM). This individual may be a Research Program Manager or the Program Office's NEPA Contact.

The role of the NDM is defined and explained in several DOE documents: the Secretary's June 13, 1994, NEPA Policy Statement; DOE Order 451.1A on NEPA; and the DOE NEPA Contracting Reform Guidance of December 1996 (all of which are found in the DOE NEPA Compliance Guide). Additionally, the SC and Chicago Operations Office NCOs have collaborated to prepare practical guidance for SC's NDMs that is based on recent experiences, both at HQ and in the field. This guidance is included as Appendix C. In this NDM role, the SC Program Offices have the responsibility for implementing the EA document preparation, management, review and approval process by:

- Providing for the funding of the EA preparation process, and the procuring of contractor technical assistance when that is needed (as per section 6.2.3 below);
- Scheduling of the EA process within the overall SC project management process, so that it is completed in a timely and cost effective manner;
- Coordinating and stewarding the SC HQ NEPA review, concurrence, and approval process;
- Utilizing a NEPA document management committee of internal SC and DOE stakeholders to review and concur in the preparation of the EA;
- Reviewing and commenting on EAs prepared under their purview, especially
  those aspects of the EA that describe and analyze the technical and scientific
  features of the project;
- Communicating comments and revision needs on EAs for their projects to the EA authors and/or laboratory sponsors;
- Managing the quality and adequacy of the EAs and consulting and coordinating with the SC NCO;
- Preparing an EH Lessons Learned survey after the completion of the EA process (see section 6.3.1 below);
- Providing for creation and maintenance of the administrative record on the EA process (see section 6.1.4 below).

#### 5.0 ENVIRONMENTAL ASSESSMENT MANAGEMENT PROCESS

It is SC's goal to prepare EAs that assist in planning and decision making, focus on the issues ripe for decision making, and that meet DOE's standards for quality and adequacy. These EAs shall be as brief and concise as possible, with a goal of meeting the 15 page length recommendation of the CEQ ("Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations, Question/Answer No. 35).

The EA document management process at SC HQ shall consist of the management and supervision of all of the process elements related to EAs under the purview of SC HQ. The roles and responsibilities of the managers and staff involved with the SC HQ EA process will be as specified in Section 4 above of this QA Plan. This process will utilize all of the infrastructure and QA elements necessary to assure timeliness and quality of the documentation in support of quality decision making by SC. This EA document management process will be implemented as early as possible in the project or program planning cycle by the NDM. This process will consist of the elements involved in: internal scoping; the EA determination; EA preparation, review, and approval; and the preparation, review, approval, and issuance of FONSIs when a final determination is made that preparation of an EIS is not necessary. This process also will apply to the adoption by DOE of another federal agency's EA when that is appropriate. The steps and milestones in the EA document management process that should be followed are summarized in Subsection 6.2.1, below of this QA Plan.

# 6.0 ENVIRONMENTAL ASSESSMENT QUALITY ASSURANCE INFRASTRUCTURE

The SC HQ NCO will provide for and steward the QA infrastructure that supports the SC HQ EA document management process and its continuous improvement, as well as the use of EAs by SC management in supporting planning and quality decisions. This QA infrastructure bridges or crosscuts the SC HQ programs, as well as the Operations Offices and National Laboratories that conduct SC-sponsored research. The QA infrastructure therefore assists and supports those field elements that utilize EAs in support of SC-sponsored research activities. This infrastructure will include implementation of the applicable quality assurance criteria in the areas of management, performance, and assessment as identified in DOE Order 5700.6C. It is based on the underlying principles and value-added requirements contained in the May 1992 QA guidance document that accompanied the QA Order 5700.6C (see *Ref. 9*). These SC infrastructure areas are summarized against the QA Order Criteria below.

## 6.1 Management

## 6.1.1 Criterion 1: Program

The organizational structure of the Office of Science, along with the roles and responsibilities of the principal managers and staff with authority and responsibility for implementing NEPA relative to EAs, will be as described in Section 4.0 above. The principle senior managers, supervisors, program managers, the NCO, and the NDM are those who manage, perform, and assess the adequacy of work and the quality of EA documents that support SC's project and program planning and decision making. These principals are responsible for the timing, scheduling, and managing the cost of the SC HQ EA process.

<u>Value-Added Components</u>. The current SC Strategic Plan dated July 1999 (*Ref. 10*) contains the organization's mission, policies, and objectives. The integration of ES&H into the research mission is a fundamental tenant of the SC program. The Office of Science uses a proactive approach to ES&H (including NEPA) that emphasizes preventing or eliminating hazards and environmental impacts. This is preferred over an approach that uses mitigative measures and administrative controls. The principal vehicle for achieving these results is to integrate ES&H and quality into program planning, budgeting, and execution of SC research programs. SC supports empowerment of the Operations Offices in the implementation of NEPA via the delegated authority for EAs. Planning and scheduling for the SC EA processes are aided by several SC lessons learned and guidance documents. The responsibility for state notifications and state/tribal coordination is assigned from SC-1 to the SC HQ NCO and the NDM, thereby promoting efficiency.

## **6.1.2** Criterion 2: Personnel Training and Qualifications

The SC HQ NCO is expected to be a qualified NEPA professional by background and experience. The NCO will attend and actively participate in the DOE NEPA Compliance Officer meetings sponsored by EH. This is done in order to obtain current information and training and then to distribute relevant information to the SC Program Offices and field elements, as appropriate. Other NEPA-related and environmental training opportunities are available to the NCO through the SC and DOE training programs.

The SC HQ senior managers, supervisors, program managers, and other HQ staff have been provided NEPA and environmental compliance training courses organized by the SC HQ NCO. Such periodic awareness and update of training shall continue. The SC Program Office NEPA Contacts and any current NEPA Document Managers are included on the EH distribution list to receive guidance materials and invitations to DOE NEPA community meetings and training sessions. Under the requirements in Section 5(d)(9) of DOE Order 451.1A, the SC HQ NCO is responsible for coordinating NEPA training for SC HQ.

<u>Value-Added Components</u>. The SC HQ NCO will ensure that SC HQ personnel are capable of performing their NEPA process responsibilities by providing an infrastructure and continuous improvement program of NEPA materials, process tools, procedures, guidance, information, lessons learned, assessment, and training. This will include periodic SC NEPA Workshops similar to those held since 1991 in conjunction with the Semiannual ES&H Coordination Meetings sponsored by SC-80. The SC "Training Needs Survey in NEPA Implementation" (*Ref. 11*) addressed specific needs of SC throughout the organization. This tool will be revisited periodically as appropriate. At the request of the Operations Offices (and resources permitting), the SC HQ NCO will provide training on the preparation of EAs based on SC's lessons learned and continuous improvement program in support of SC-sponsored research in the field. This infrastructure will be designed to promote higher levels of quality in SC's NEPA products and services related to the decisions under review at SC HQ.

## **6.1.3** Criterion 3: Quality Improvement

SC will continue to encourage its employees to improve NEPA's products and services. SC will continue the implementation of its program to detect and prevent quality problems in the EA process and to ensure continuous improvement in support of quality decision making. This may include the periodic updating of the SC "Guidance on the Preparation, Scope, and Content of Environmental Assessments" (SC NCO Communication 92-04) and the SC "Lessons-Learned from Environmental Assessment Reviews" (SC NCO Comm. 94-02), as EA process data and experience are gained. The NEPA Document Manager Guidance provided in Appendix C of this QA Plan is intended to be another step in continuous improvement and lessons learned. When appropriate, SC will continue to utilize the metrics of average and median EA review and approval times, adjusted for EA approval authority delegated to SC-1. All of these metrics will be used to identify, resolve, and prevent problems in the EA process. SC will continue to assess the progress of continuous improvement in its NEPA products and services and to communicate

this in a manner similar to the previous SC NEPA Program Summaries. SC will continue to utilize NEPA Workshops as a means to focus on continuous improvement, successes, problem solving, and issue resolution.

The EH "Green Book and other guidance contained in the DOE NEPA Compliance Guide (along with SC's EA guidance and EA lessons learned study) will be used in the preparation and review of EAs at SC HQ. The internal scoping of SC EAs will be used to ensure that the EAs are focusing on the proper issues and will be completed in a timely manner to support decision making. The SC NDM (in consultation with the SC HQ NCO) will coordinate the concurrent review of draft EAs by individuals and organizations with the proper expertise to ensure document quality. This will include the DOE Office of General Counsel (GC-51) and may include EH, as appropriate. This concurrent review will be coordinated as much as possible through the use of electronic mail for transfer of documents and comments.

Value-Added Components. The SC infrastructure for quality improvement in the EA includes encouraging individuals and organizations to examine their work processes and make suggestions for quality improvement, so that the process becomes timely and efficient and leads to positive results. This process quality improvement is supported by an infrastructure of electronic communications, training, regular workshops, lessons learned analyses, and guidance and procedures that bridge SC programs and provide for consistency across SC. SC employees are encouraged to examine their NEPA work and to make suggestions for improving SC's `NEPA products and services'. As a research community, SC should be on the 'cutting edge' of innovative approaches to implementing NEPA and all needed environmental protection programs. The Office of Science's past problems and successes in the NEPA process provide opportunities for learning and for improvement, just as do problems and successes in the scientific process. The Office of Science welcomes suggestions and innovative ways to improve quality, efficiency, and the effectiveness of environmental protection as part of the scientific mission.

#### **6.1.4** Criterion 4. Documents and Records.

The EA documents used to support SC HQ decision making will be prepared, reviewed, approved, and issued according to DOE and SC policies, procedures and requirements. The SC HQ EA document management process will be as summarized in Subsection 6.2.1, Criterion 5, below.

An administrative record is required for each EA prepared by DOE. The SC HQ NEPA Document Manager will be responsible for development, control and maintenance of the record. In general, the administrative record should consist of all documents (hard copies, electronic files, overhead slides, pictures, or other documents or records) relied upon in preparing the EA, as well as those that were considered by the decision maker in arriving at any decisions. The administrative record documents DOE's consideration of all relevant and reasonable factors and should include evidence of diverging opinions and criticisms of the proposed action or its reasonable alternatives, where that may exist. Overall, it should demonstrate and document that

DOE took the "hard look" at the proposed action and its reasonable alternatives that is required by law (*Ref. 12*). Federal agency decisions under NEPA are subject to judicial review, and a well developed administrative record provides protection against a lawsuit that could challenge DOE's decisions and its decision making process, and thus have far-reaching effects on new proposed projects or programs. The NEPA administrative record is the basis for demonstrating that DOE considered all appropriate information before making a final decision regarding a proposed action subject to NEPA. The administrative record also demonstrates that DOE followed the proper process in complying with NEPA's procedural provisions.

## **6.2** Performance

#### **6.2.1** Criterion 5: Work Processes

The process for initiation, preparation and review of SC HQ EAs, the final determination on whether to prepare an EIS (based on the analyses in the EA), and the use of the EA process in support of quality decision making are specified throughout this QA Plan. The established technical standards and administrative controls also are summarized in the QA Plan. The specific steps and milestones in the SC HQ EA document management process that will be followed are summarized below.

• <u>Determinations</u> - Timely coordination of formal determination requests to initiate an EA will be prepared by the sponsoring SC Program Office, in consultation with the NCO, for written approval by SC-1. See Appendix D for an example of a written EA determination by SC-1. The SC "Guidance on Early Timing and Implementation of the NEPA Process and Integration of the NEPA Process with the Project Management Process" (SC NCO Comm. 94-01) may be used as appropriate guidance. Keep in mind that the decision to prepare a NEPA document is tied to SC's declaration of a proposal or proposed action. The DOE NEPA regulations, at 10 CFR 1021.200(b), stipulate that:

"DOE shall begin its NEPA review as soon as possible after the time that DOE proposes an action or is presented with a proposal."

• **EA Schedule** - A draft EA NEPA schedule should be prepared and included with each determination made by SC-1, if possible. The planned milestone dates should be provided to the SC HQ NCO for tracking the progress of each EA. In setting the schedule, the NDM should keep in mind that the DOE NEPA regulations, at 10 CFR 1021.210(b), stipulate that:

"DOE shall complete its NEPA review [an EA in this case] before making a decision on the proposal (e.g., normally in advance of, and for use in reaching, a decision to proceed with detailed design)..."

The EA schedule, therefore, must be integrated with the overall project schedule and

figured accordingly, so that the EA process is completed prior to initiation of detailed design. If the EA process leads to a determination that an EIS is needed, that will need to be factored into the project schedule for completion prior to detailed design.

- Determination Notification Notification of the host states/tribes of DOE's intent to prepare an EA will be made in a timely manner following an SC-1 NEPA determination, usually within two weeks. The notification will be a letter, prepared by the NDM, and signed either by the NDM or the SC HQ NCO, with concurrence from the sponsoring SC Program Office. The current EH "Yellow Book" will be used as the source of official host state/tribe points of contact. The Yellow Book is updated periodically, but in between updates the NDM should consider talking with the NCO of the appropriate Operations Office, that would administer the proposed project under review, regarding updates to the list of host state or tribal contacts to be notified. See Appendix E for example notification letters.
- Internal Scoping Internal scoping is a collaborative process of designing the scope and content of an EA, as well as setting of the schedule for its preparation. To the maximum extent practical, the goal of internal scoping should be to focus an EA on the issues of concern to decision making, and to reach agreement among the stakeholders on the issues of concern. Internal scoping under this Criterion 5 will be consistent with the document and process "design" under Criterion 6 below, and with Criterion 7 below for inclusion of procured services personnel in the internal scoping process. Internal scoping on the content and schedule of each EA will follow the SC "Internal Scoping Procedures for Environmental Assessments" (see Appendix F to this QA Plan). Internal scoping shall be initiated and coordinated by the SC NDM with assistance from the SC HQ NCO, and should include all appropriate SC and DOE stakeholders. This internal scoping should result in:
  - (1) the preparation of a "Table of Contents" outline on the scope and content of the EA;
  - (2) a design of the process to be followed for review and approval of the EA; and
  - (3) a schedule (or affirmation of the validity of the schedule attached to the original determination).

Internal scoping should consider whether there is a potential need for any *Federal Register* notices (i.e., for floodplains/wetlands or Proposed FONSI) and the likelihood that a Mitigation Action Plan might be necessary. The potential need for a Proposed FONSI should be considered early using the two criteria in 40 CFR 1501.4(e)(2) and 10 CFR 1021.332(d). If any of these notice procedures may be needed, the EA schedule will need to be planned accordingly. SC has prepared and issued Proposed FONSIs for new proposed facilities, as well as notices for floodplains and wetlands involvement. The NCO should be consulted for examples.

As part of internal scoping, the NDM must contact EH-42 and request a DOE/EA number

for the document under consideration.

- <u>Public Participation</u> After the internal scoping process has been completed, the NDM should consider whether the host states and tribes should be contacted to inform them of the results of internal scoping and proposed action. The state and tribe should be offered the opportunity for an informal review of the draft EA prior to formal coordination. Public participation should follow that presented in the SC "Public Participation Plan for Environmental Assessments" (Appendix G to this QA Plan).
- documents should occur to the maximum extent possible, to promote efficiency, save time, reduce delays, and enhance quality. Concurrent reviews should be conducted to the extent practical on early draft documents, so that quality and adequacy can be built in early in the process, rather than "inspected in" later in the review and approval process. The concurrent review should be initiated and coordinated by the SC NDM, with assistance from the SC HQ NCO, and should include all appropriate SC and DOE stakeholders. These stakeholders include the following: the sponsoring SC HQ Program Offices; the cognizant Operations Office, Area or Site Office; the Laboratory that would conduct the proposed work; and the Office of General Counsel (GC-51). The Office of NEPA Oversight (EH-42) could be included, as appropriate.
- **EA Quality** The quality and adequacy of each EA will be assured by preparing, reviewing, and approving them against existing CEQ, DOE, EH, and SC guidance and standards (as identified in Section 3.0 above of this QA Plan). Quality also will built in up-front by initiating the EA process early in project planning, and by involving the appropriate persons and organizations in the preparation, review and approval process.
- <u>SC Concurrences</u> Each EA prepared by SC HQ will receive the concurrence of the appropriate SC Project or Program Manager, the Program Office ES&H Coordinator, the Program Associate Director, and the SC HQ NCO prior to submittal to General Counsel for concurrence. This concurrence will be coordinated by the SC NDM.
- GC Concurrence Concurrence will be secured from the Office of General Counsel (Assistant General Counsel for Environment, GC-51) prior to seeking authorization for host state/tribal coordination for review of the Draft EA from SC-1. Such concurrence will be evidenced by the GC signature on the concurrence ladder, which may be associated with concurrence on the EA or may be associated with the SC memorandum transmitting the EA to the host state/tribe.
- <u>State/Tribal Coordination of Draft EAs</u> The initiation of host state/tribal coordination for the review of Draft EAs will be authorized by SC-1 and must occur

prior to the final threshold determination by SC-1. The appropriate SC guidance and the EH "Yellow Book" of state/tribal stakeholders and contacts will be used in determining the appropriate distribution for Draft EAs. Such coordination will be via a letter signed by the NDM or the SC HQ NCO that includes the EA as an attachment.

- Local Public Review of Draft EAs The Secretarial Policy on NEPA of June 1994 states that NEPA Document Managers will take appropriate action to encourage and facilitate public participation in the NEPA process. This includes providing opportunities for interested parties to review SC's Draft EAs concurrent with the state/tribal reviews, prior to DOE's final determination on the EA. For EAs prepared by SC HQ, the NDM will consult with the SC HQ NCO and with the appropriate Operations Office NCO in order to develop an appropriate plan for distribution of the Draft EA to interested parties of the local community in the vicinity of the proposed action. The Operations Office NCO also will be able to assist the NDM in placing the Draft EA into the local reading rooms, as well as in arranging for public notifications on the availability of the Draft EA for review. Consult the appended Public Participation Plan for further information. The NDM also will arrange for the Draft EA to be placed into the DOE Freedom of Information Reading Room in the Forrestal Building (room 1E-190).
- <u>Federal Register Notices</u> Preparation and management of the processes for issuance of *Federal Register* notices of Proposed FONSIs, final FONSIs, and floodplains/wetlands Notices of Involvement will be conducted by the NDM with assistance from the NCO. These notices will be prepared for signature of SC-1. All such notices will have concurrence of the NCO, the SC Program Office, GC-51 and GC-74 (Assistant General Counsel for Regulatory Law) prior to signature by SC-1. The final signed notice should be coordinated with GC-74 for Federal Register publication. The NCO has example notices.

When a Proposed FONSI is issued for public review, EH advises that state/tribal coordination of the Draft EA should be completed prior to issuance of the Proposed FONSI for public review in the *Federal Register*. Under certain circumstances, it may be appropriate to conduct a concurrent public review of the published Proposed FONSI and the Draft EA by the host state/tribe. The NCO and GC-51 should be consulted to determine the most appropriate strategy.

• <u>Final EAs</u> - Any public comments received on Draft EAs from host states/tribes and the public must be resolved in the final (or revised) EA. The final EA must complete the administrative record of the disposition of comments and responses (as appropriate) by including the comment letters as an appendix to the EA and then revising the EA accordingly, and/or including a comment/response matrix in an appendix. EAs that are revised based on public comments received will go through the SC concurrence process and then should be provided to GC-51 for final legal

concurrence. If no comments are received, the EA that was transmitted to the host state/tribe (and previously concurred in by GC) may be the final EA presented to SC-1 along with a request for a final threshold determination on whether to issue a FONSI or begin preparation prepare an EIS.

• Final Threshold Determination – Based on the analyses in the final EA, the sponsoring SC Program Office should prepare a recommendation for SC-1 on the need for an EIS, via a memorandum from the Program Associate Director to SC-1. The Program Office should utilize its NEPA document management committee for reviewing the analyses in the EA and for deciding whether the potential environmental impacts of the proposed project have crossed the "threshold" of significance. In so doing, the committee thus should recommend whether an EIS is needed. The CEQ regulations and their definition of "significance" of impacts (at section 1508.27) should be consulted.

When the final determination is for the issuance of a FONSI, the standard SC FONSI format (SC NCO Comm. 92-01) should be considered for use. It should be prepared for signature of SC-1. The NDM should consult with the NCO and GC-51 regarding when the use a shortened version of a FONSI may be appropriate. If the EA process results in a determination to prepare an EIS, the standard DOE process leading to preparation of a draft Notice of Intent should be followed.

• Availability of EA and FONSI - When an EA results in issuance of a FONSI, the public must be notified of the availability of the EA and FONSI using the procedures established in 40 CFR 1501.4 and 1506.5 and in 10 CFR 1021.322. The NEPA Document Manager in consultation with the SC HQ NCO should conduct this notification. The NDM also may request assistance from the appropriate SC Operations Office in providing public media notification of the availability in the local community near the site that would host the proposed project. Copies of the EA and FONSI (in hard copy and on computer disc) are to be provided to EH-42, as per the procedures in DOE Order 451.1A. The EA should be provided in electronic format suitable for posting on the DOE NEPA web site by following the DOE October 1998 "NEPA Document Electronic Publishing Standards and Guidelines."

<u>Value-Added Components</u>. The work processes involved with the SC HQ EA document management process use many approved standards, guidance, procedures, and instructions to assist in maintaining efficiency and assuring quality. These standards are available in the DOE NEPA Compliance Guide and on the NEPA web sites for DOE and SC-83.

## 6.2.2 Criterion 6: Design

"Design", for the purposes of this QA Plan, refers to the design of SC's EA documents (i.e., their scope and content) and the process to prepare, review, and approve them. This design then leads

to the outputs of quality decision making, proper public involvement, and environmental stewardship. These EA and process designs will be based on the established NEPA policies, requirements, guidance and procedures accepted by DOE and SC and reflected in this QA Plan. Sound principles of reason and issue identification will be utilized as inputs in the internal scoping process to establish the design of the EA and its schedule of milestones, leading to a final threshold determination and the output of quality decision making in support of SC research.

A "sliding scale" (or graded approach) will be used, as appropriate, in the EA's design and in the rigor of the review and approval process. EAs that assess sensitive environmental or potentially controversial issues shall undergo an appropriately rigorous and thorough process. EAs that assess minor and non-controversial issues may undergo a less rigorous process. Less rigor, however, will not sacrifice quality or adequacy of EA content. The design of the document scope and schedule will be "risk based" and consider the legal risks to the Department and the risks to environment and to the health and safety of workers and the public. Regardless of how the sliding scale is used, every SC EA must be capable of supporting a quality threshold determination. The internal stakeholders will finalize the EA and process designs as soon as possible following the EA determination. Changes in final designs (during the process implementation) occasionally may be necessary. The internal stakeholders will justify and approve the designs in a timely manner by the internal stakeholders. The NDM, in consultation with the SC HQ NCO, will coordinate this internal scoping and design process, and assure that "design" under this Criterion 6 is consistent with internal scoping under Criterion 5 above.

<u>Value-Added Components</u>. Example EA designs and process experiences from previous SC EAs are found in the summaries provided in the SC Annotated NEPA Bibliography (SC NCO Comm. 92-07). These may serve as examples of "verified" or "completed" designs that have been through the DOE review and approval process, including state/tribal coordination and public review. Use of this information as lessons learned may positively influence the process and its outcomes. To achieve quality in its EA products and services, SC will take into account the schedule of the EA process. The use of a sliding scale or graded approach in the design, review, and approval of EAs will permit SC to place and use resources where they are most needed.

## **6.2.3** Criterion 7: Procurement

SC will ensure that purchased or supplied services and technical assistance for preparation of EAs and EA-related documents meet expectations. SC will ensure that suppliers are qualified to perform the required services, and that sufficient supplier resources are available to implement and complete the tasks. SC will ensure that such suppliers (i.e., contractors and all EA authors) are provided with all of the necessary "tools" of guidance, procedures, rules, and requirements to adequately prepare and supply quality EAs. Suppliers will be involved early in the EA design, ideally as part of the EA internal scoping process (as per Criteria 5 and 6 above). Supplier

performance will be monitored periodically to ensure that quality service and acceptable deliverables continue to be supplied. Suppliers will be involved in the SC evaluation of their products.

If contractor support is needed for preparation of an EA, securing such support will be the responsibility of the sponsoring SC Program Office. The NDM should coordinate the procurement request with the Program Office and the SC Grants and Contracts Division, as appropriate. Example statements of work for NEPA document preparation are contained in the DOE document "A Brief Guide: Department of Energy-wide Contracts for National Environmental Policy Act (NEPA) Documentation." It also contains guidance for procuring contractor assistance through the DOE-wide contract mechanism. It can be found on the DOE NEPA web site. A sponsoring SC Program Office may use this contracting vehicle, hire a contractor separately, or charter a team of DOE federal employees for preparation of a NEPA document.

<u>Value-Added Components</u>. To achieve quality in its EA products and services, SC will take into account resource considerations, cost and schedule. At the completion of an EA effort, the NDM and the NCO are encouraged to complete one of the DOE lessons learned surveys that are found on the DOE NEPA web site under the category of "DOE NEPA Process Information." Also, the NDM is encouraged to complete a "DOE NEPA Contractor Performance Evaluation" form if the DOE-wide contracting mechanism was used in preparation of the EA. This form can be found in the "Brief Guide" cited above.

## **6.2.4** Criterion 8: Inspection and Testing

The issuance of a draft EA for host state/tribal coordination represents a draft DOE/SC position (or recommendation) that an EIS probably will not be required for the proposed action being assessed. The draft should also include that DOE/SC intends to issue a FONSI unless significant new information emerges from the state/tribal coordination process to alter that position. If DOE/SC believes that an EIS might need to be prepared, then either a Proposed FONSI should be issued for public review or a Notice of Intent should be prepared. The host state/tribal review of a draft EA, therefore, serves as a "test" to demonstrate whether the EA and its process will "perform as intended" (i.e., by enabling an analysis of the significance of impacts and a determination on whether the issuance of a FONSI is appropriate). The public review of a Proposed FONSI also serves as a similar test.

<u>Value-Added Components</u>. This "testing" of draft EAs by host state/tribe reviews (or public review of a Proposed FONSI) is a check upon the design scope of the document, its adequacy and completeness, its process, and the proposed determination that an EIS is not required. This "test" is conducted by personnel not directly connected with or responsible for the EA work (i.e., the public).

## 6.3 Assessment

## **6.3.1** Criterion 9: Management Assessment

The SC HQ NCO will serve as the representative of SC management for the purposes of performing assessments of the adequacy and quality of the EA program and its effective implementation. This assessment function will be conducted partly on conformance to requirements, standards or procedures. Assessment will focus on whether SC is effectively using the support of the services provided by the EA and NEPA processes in the conduct of its research mission. The assessments will identify, correct, and prevent problems that could hinder the achievement by SC of quality decision making and environmental stewardship via the EA and NEPA processes.

The SC HQ NCO will prepare and distribute overview assessments of SC's EA and NEPA programs, and their relation to SC's mission, in the form of periodic reports, such as the Annual Program Summaries referenced above. Such periodic reports will assess:

- the integrated SC NEPA QA program and its performance
- achievement of quality decision making as per Section 7.0 below
- performance of line management in implementing the EA and NEPA processes and opportunities for improving quality, cost effectiveness, timeliness, and streamlining of the SC EA and NEPA processes.

These reports will evaluate performance and results in a manner that is consistent with DOE Order 5700.6C. Additionally, a Lessons Learned survey will be completed by the NDM and the NCO at the end of the NEPA process for each EA. The survey can be found on the DOE NEPA web site. It will serve to provide input to this management assessment initiative. Also, this QA Plan will be revisited and assessed periodically in order to maintain its relevance in assuring quality EAs and their NEPA process.

<u>Value-Added Components</u>. Management assessments of the EA program will provide feedback on the performance of the system and offer opportunities for quality improvement. The assessment will identify, correct, and prevent management problems (in using NEPA) that hinder achievement of SC's objectives. It will focus on broad categories of issues to determine the effectiveness of the integrated management system. This is part of SC's proactive approach to problem prevention.

## **6.3.2** Criterion 10. Independent Assessment.

Independent assessment of the SC EA program (and its item quality and process effectiveness) will come from the independent oversight and the document/process reviews provided by GC (and by EH, as appropriate). GC will concur in each SC HQ EA, as stipulated by Criterion 5 above. Periodically, SC may request that EH assist in the assessment of the effectiveness of the EA program in meeting SC's and DOE's objectives for quality decision making and environmental stewardship. The host state/tribal reviews and the public reviews of SC's EAs and related documents will provide an additional independent assessment of the documents and the process on a more continuing basis. The input from all independent sources will be received by

SC as meaningful feedback and used to correct deficiencies and improve quality and effectiveness in the EA program.

<u>Value-Added Components</u>. Independent assessments of the EA program and its item components will provide feedback on the performance of the system and offer opportunities for quality improvement. These independent inputs will be from internal and external customers and stakeholders.

## 7.0 ENVIRONMENTAL ASSESSMENTS AND QUALITY DECISIONS

The EAs historically prepared by SC reflect a variety of decision-making initiatives among all four of the SC research Program Associate Director's offices. These have varied from brief EAs on congressional-initiative construction grants to very detailed EAs on the siting, construction, and operation of significant new research facilities. Regardless of project size or EA length and scope, the EA document is part of the "service" that enables SC managers to make informed project and program decisions that consider environmental values and consequences along with other technical, financial, administrative, mission, and planning considerations. The SC EA documents, their process, and the SC EA supporting infrastructure, are SC's NEPA "services". These lead to SC's NEPA "products" (i.e., the desired results of the process). These desired results include quality environmental decision making, support for the programs and projects, and attainment of the Act's environmental goals (preventing and eliminating environmental damage, attaining beneficial uses of the environment without degradation, reduction of risks to the environment, etc.), along with public disclosure of agency decisions and actions.

The CEQ regulations state [in section 1500.1(c)] that ultimately it is better decisions that count and not excellent paperwork. Better decisions (in the CEQ sense) would occur from emphasizing results and excellent action rather than emphasizing better documents and excellent paperwork. Using the criteria for quality decisions developed during the 1994 Office of Energy Research (now SC) NEPA Workshop (*Ref. 13*), SC interprets quality decisions (in the CEQ sense) to be those that would:

- Be based on the best available information and an understanding of environmental consequences [Using Criteria 5, 6 above];
- Be based on real choices among real alternatives, early in project planning and design [Criteria 1, 5, 6]; and
- Benefit from public involvement [Criteria 5, 8, 10];

Quality decisions from the SC decision maker's perspective would have the above three components, and they would:

- Be made in an efficient, cost effective, and timely manner [Criteria 1, 5, 6, 7]; and
- Achieve the DOE and SC decision-maker's purpose and need [Criterion 9].

#### 8.0 REFERENCES

- (1) "Program Summary [for 1992] of the Office of Energy Research, Office of Assessment and Support, Environmental Division (ER-8.2), NEPA Accomplishments and Future Directions.. ER NCO Communication No. 93-02. August 18, 1993.
- (2) "Office of Energy Research National Environmental Policy Act Program Summary for 1993 and Status Report on Continuous Improvement in NEPA Services and Products.. ER NCO Communication No. 94-03. May 16, 1994.
- (3) Office of Energy Research "National Environmental Policy Act Program Summary for 1994 And Status Report on Continuous Improvement In Energy Research NEPA Services and Products." ER NCO Communication 95-03. October 1995.
- (4) Office of Energy Research "The National Environmental Policy Act (NEPA) Program Summary for 1995-1996 and Status Report on Continuous Improvement in NEPA Services and Products." ER NCO Communication 97-01. November 1997.
- (5) "Office of Energy Research Guidance on the Preparation, Scope, and Content of Environmental Assessments." ER NCO Communication 92-04. November 5, 1992.
- (6) "Office of energy Research Lessons-Learned from Environmental Assessment Reviews." ER NCO Communication 94-02. March 10, 1994.
- (7) Office of Energy Research "Annotated Bibliography of NEPA EAs and EISs." ER NCO Communication 92-07. [Updated periodically].
- (8) "Delegation of Environmental Assessment Authority." Memorandum from Tara O'Toole (EH-1) to Martha Krebs (ER-1).
- (9) "Quality Assurance Program: A Total Management System." Office of Nuclear Safety Policy and Standards. May 1992. [Contains DOE Order 5700.6C Quality Assurance, plus guidance on implementing the Order].
- (10) "Strategic Plan." Office of Science. June 1999.
- (11) Office of Energy Research "Training Needs Survey in National Environmental Policy Act (NEPA) Implementation.. ER NCO Communication No. 93-10. July 30, 1993.
- (12) "Keeping an Administrative Record." *National Environmental Policy Act Lessons Learned Quarterly Report*. Issue 12. USDOE Office of NEPA Policy and Assistance. September 12, 1997.

(13) "NEPA Workshop: Continuous Improvement in ER's NEPA Products and Services." Report of the Office of Energy Research Sixth Semiannual Environment, Safety, and Health Coordination Meeting, February 1-3, 1994, Gaithersburg, Maryland. Section 10, pages 10-21.